

GUIDELINES

DIVISION OF SANITATION FACILITIES CONSTRUCTION

Office of Environmental Health and Engineering
Navajo Area Indian Health Service
Window Rock, Arizona

CHAPTER 9--NECA

Section 1: NECA-IHS Job Cost Accounting Procedures
Guideline No. 9.1 (06-19)
February 2006

Supersedes: G9.1 ,(03-18), (99-17), G 9.1 (99-3), G 9.1 (88-9), G 86-4

Distribution: Standard List
General Manager, NECA

INTRODUCTION

This guideline defines the procedures for the Navajo Engineering and Construction Authority (NECA)/Navajo Area Indian Health Service (IHS) Job Cost Accounting (JCA) System which was developed by the NECA/IHS Cost Accounting Group.

GENERAL

In order to promote increased efficiency in construction of sanitation facilities, to track actual construction costs, and to compile some historic construction cost data, JCA is used to report NECA costs on all P.L. 86-121 projects by standardized units of construction. JCA is a cooperative effort between the IHS, the NECA, and NTUA when applicable. The IHS project manager shall prepare the following JCAs: 1) A preliminary JCA to develop a project estimate table for project feasibilities and/or the Project Summary submittals; 2) A planning JCA for early construction activities such as plumbing, soils testing, tank purchase/construction, well drilling, etc.; and 3) A Construction JCA to serve as a finalized project budget.

PRELIMINARY JCA

The preliminary JCA is to be used by the IHS Project Manager when preparing the cost estimate table for feasibility studies (See guideline 19.1) and for Project Summaries (see Guideline 3.1). This Preliminary JCA will serve as a checklist to eliminate omission of any major items. Note, JCAs may be modified to include non-standard Pay Items and Cost Codes covering projects with non-typical scope of work.

Each project needs to be evaluated on its own merit. Do not just use unit costs and work items from previous projects for the project of concern without evaluating the applicability of the previous project's JCA data. Some work item costs may vary significantly between projects. Examples of exceptions would be increased mobilization at remote sites like Alamo, extensive rock excavation required, and highly sensitive archaeological areas. The District Engineer is ultimately responsible for the accuracy, completeness, and reliability of the cost estimate for the Project Summary.

CONSTRUCTION/PLANNING JCA'S

Construction/planning JCA's are used by project managers and by NECA to set up a project in the NECA cost accounting system to allow for meaningful cost tracking and progress reports. The basic steps in setting-up and utilizing these JCA's for tracking construction costs are listed below:

1. IHS Project Manager: Prepares estimated quantities, unit costs, and the resulting "Job Cost Listing" or "Budget" for a specific project.
2. NECA IHS Consultant: Performs a cursory review to be sure major items are covered and unit costs are "in the ballpark". (As discussed above, the District Engineer is responsible for getting the costs in the ball park.)
3. NECA Cost Accountant: Puts project on computer system with assigned cost codes.
4. NECA Timekeeper: The NECA personnel are responsible for correctly inputting the correct coding of work activities on the time sheets, daily production reports, and the weekly reporting sheets.
5. NECA HQ: Issues weekly Productivity Report and Job-Cost-to-Date Report (Weekly Reports) to the IHS District Engineer, the IHS Project Engineer, and the NECA Foreman.
6. IHS Engineer and NECA Foreman: Discuss previously distributed productivity and job cost print outs.

If a project has planning activities to be done through NECA, those pay items (e.g., well drilling) can be estimated and put on the JCA system in advance of other units of the project (such as waterline).

Once set-up, estimated quantities shall not be changed unless the scope of the project is changed (or if correction in the initial and subsequent JCA's are necessary) as this estimate becomes the fixed reference point with which to compare progress.

Requests for purchase of materials through the NECA shall be in accordance with DSFC Guideline 9.3. Note that a cost type "S" has been established for the IHS Engineer to accumulate costs for direct materials acquired by IHS. However, this cost type does not show up on the NECA computer printouts and these costs must be accounted for in the IHS project accounting

system. The Weekly Reports should be used to monitor progress and costs to generate changes in construction practices or cost estimating, such that projects are successfully completed within budget.

Be well acquainted with the attachments herein in order to accurately and effectively utilize JCA for the benefit of P.L. 86-121 projects.

PROJECT BUDGETING PROCEDURES

The Construction JCA serves as the finalized Project Budget. Again, the IHS Project Manager prepares the Construction JCA, which is reviewed by the IHS District Engineer, and a copy is submitted to the NECA a minimum of two weeks prior to the preconstruction conference. This should allow for the computer printout to be available at the project preconstruction conference.

The list of items of work (see Attachment A) has been standardized and a project budget should use work items from this list. The fewer cost codes and items of work, the easier the reports are to interpret. Time lags may cause the JCA to be of little immediate value on very short construction jobs. They are still required, however, for historical purposes. Additional cost codes will be approved only with the concurrence of the IHS District Engineer and the NECA IHS Consultant.

To set-up a project in the NECA Cost Accounting System and to get meaningful reports, the Project Budget must be established before any construction begins or costs accumulated. This includes submitting a Planning JCA for Planning Projects. A Planning JCA covers planning activities including well drilling, test pumping, and development; NEPA clearance activities; soil evaluations for tank foundations and lagoons; plumbing, etc. The Planning JCA need only include those activities planned for completion using Planning Project funding. A NECA crew and/or contractor will not begin work on a project until the Project Budget is established. In submitting a budget, include the following:

1. The standard NECA Cost Accounting Estimating Sheet with only the items which pertain to your job.
2. Total Cost Estimate for each item of work to include whichever cost types apply:
 - L = Direct Labor Cost
 - E = Equipment Usage (NECA Equipment)
 - I = Overhead (per current NECA rate)
 - M = Permanent Materials (Purchased through NECA)
 - R = Outside Services and Rentals
 - S = IHS Direct Expenditures (surveying/drafting money, power line extensions)

- T = Tools and Supplies
- U = Utilities
- V = Travel and Related Expenses
- F = Management Fee

3. Total Estimated Quantity and Unit of Measurement for each item of work. NOTE: Pay Item is a group such as 6-inch waterline, septic tank, storage tank, etc. Cost Code is a code number assigned to an "Item of Work", i.e., 0200 is 2-inch waterline. Cost Type would be labor, equipment, overhead, materials, etc., from the listing under Item 2 above.

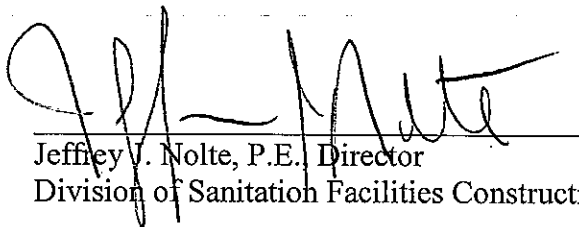
UTILIZING JCA

The source documents for the whole system are the estimated budget, the daily time sheets, and the daily production reports. These need constant attention for proper coding and reporting by the IHS Project Manager and the NECA Timekeeper to make the system's information useful.

The JCA accomplishments and actual unit costs will be compared to the estimated quantities and estimated unit costs. This is to be a weekly function. This report of productivity will be used as an on-going monitor of the project (suggesting where adjustments need to be made) and a guide for future estimating of project costs.

The NECA Field Supervisor and the NECA Foreman will utilize the source documents to see how they are doing toward finishing the project within budget and on time. Be sure to discuss the cost accounting reports and costs with the NECA Foreman and the NECA Timekeeper so that they are active participants in this aspect of the project.

APPROVED BY:



Jeffrey V. Nolte, P.E., Director
Division of Sanitation Facilities Construction

- Attachment A - Description of Items of Work (Feb-06)
- Attachment B - NECA/PHS JCA Reports
- Attachment C - NECA Labor and Equipment Reporting Policies and Procedures
- Attachment D - Calculation of Overhead and Management Fees
- Attachment E - JCA Spreadsheet (Nov-05)